

Progress Report For Work Plan : FLOODING

June 1, 2000

Introduction

This report outlines the progress made to date for the Flooding Work Plan. This work plan, which can be reviewed in its entirety on a separate page on this web site. The work is being done by the Corps of Engineers (COE), Pittsburgh District and the Office of Surface Mining. The purpose of the work plan is to use computer models to predict storm hydrograph peak discharges for several precipitation events during pre-mining and post-mining scenarios. For further information, you may wish to contact Don Stump(OSM) at (412) 937-2164.

Progress to Date

The HEC computer model simulations for the initial three sites selected in West Virginia have been completed. The reports for the individual analysis of all three sites are complete and available for distribution. The report evaluating the cumulative hydrologic impacts of these two sites is also available.

Two of the West Virginia sites already modeled are being evaluated for hydrograph flood peaks when the valley fills are recontoured to fit the AOC+ method. The ARCC Office of OSM completed preparation of the recontoured valley fill maps. The Knoxville, TN Office of OSM completed designing the drainage control structures for the AOC+ valley fills. The Pittsburgh District COE will be modeling the AOC+ topography.

OSM staff completed the evaluation of the three West Virginia sites using the computer model SEDCAD 4 to calculate the storm runoff peak flows. The SEDCAD modeling used the same conditions as the COE modeling. This evaluation provides a comparison of the surface water modeling software, SEDCAD, and the HEC software used by the COE. SEDCAD is frequently used by the coal industry to design their water and sediment control structures on coal mines.

Planned and Ongoing Tasks

The Pittsburgh District, COE, will begin modeling the AOC+ topography this month. This modeling for the two West Virginia sites is scheduled to take four months.

The Huntington District, COE, is continuing to review the flood modeling done for the Island Creek watershed, West Virginia by the Mingo Logan Coal Company. The COE had done some modeling in the 1970s and coal industry consultants have done additional modeling for Mingo

Logan recently .